

REMARKS

Claims 1, 7 and 8 are pending in the instant application. Claims 1, 7 and 8 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan (US 6,340,348 B1). The application has been amended. The claims have been amended. Specifically, claim 1 has been amended such that the high-energy ultrasound pulse, or sequence of pulses, end just before a T-wave of the ECG. Further, the claim has been amended such that the low energy imaging pulses are initiated at or around the T-wave where the high energy ultrasound pulse or sequence of high energy pulses end. Applicants respectfully submit that none of the amendments constitute new matter in contravention of 35 U.S.C. §132. Reconsideration is respectfully requested.

The Applicant has carried out the following amendments to the claims:

Claims 1, 7 and 8 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan (US 6,340,348 B1). The Applicant refer to the arguments filed October 6, 2009 and maintains the view that Krishnan does not read on the invention as claimed, as the method of Krishnan is not directed to a method including minimizing cardiac arrhythmia.

Krishnan et al. disclose that it is possible to trigger the firing of destruction pulses by a physiological signal such as a cardiac (ECG) signal (col. 6, line 27-33), e.g. the R-wave of said ECG signal (col. 7, lines 55-58). When Krishnan mentions triggering at the R-wave this is because that is the time point at which the ECG is most easily recognized.

Hence, the triggering mentioned by Krishnan is done for signal processing reasons and not for physiological reasons. Further, Krishnan also suggests that the imaging pulses are initiated at the R-wave. In column 14, lines 45-49 and column 15, lines 1-3, Krishnan specifically teaches that the imaging pulses are triggered at the R-wave. Clearly, Krishnan does not point in the direction of the claimed method wherein the destruction pulse(s) is initiated at an R-wave and ends just before a T-wave, combined with initiating the imaging pulses at the same T-wave as the destruction pulse ends. Hence, Krishnan fails to disclose, teach, or suggest expressly claimed elements of the method, and actually teaches away from the claimed invention when specifically stating that the imaging pulses are triggered at the R-wave of the ECG.

Additionally, the Office recognizes this failure of Krishnan. The office states:

“Krishnan does not explicitly disclose at what point of the physiological signal the series of low energy imaging pulse is triggered.”

However, the Office yet concludes:

“Since the imaging pulse can be triggered at any particular point it would be obvious that the pulses can be triggered at the T-wave of the ECG of the heart.”

Applicant respectfully submits that this is not the basis for a proper finding of obviousness. Stating that because the reference is silent on a claim element that the reference can then include that claim element is not how an obviousness finding is to be determined. Otherwise, a species could never be patented over a genus reference and it would also render any finding of non-obvious to require that a reference specifically

teach against a claim. Neither of these are the case, however. Species inventions are routinely issued over a genus reference and obviousness requires that a reference not teach towards a claimed invention.

As stated above, Applicant has specified when the destruction and imaging pulses are to be delivered. Krishnan fails to disclose the claimed timing, because Krishnan is solely directed to imaging, not to a therapeutic result. There is no teaching, suggestion or motivation to perform the claimed steps as the reference is only directed to imaging. Stating that one could somehow accidentally stumble onto the claimed invention when performing the method of Krishnan, without a motivation for doing so, is not the proper basis for a finding of obviousness. In the instant case, Krishnan provides no teaching, nor any motivation, for performing the steps as claimed, therefore Krishnan does not render the instant invention obvious.

In view of Krishnan's failure to disclose, teach, or suggest the instant invention, Applicant respectfully submits that the instant invention is patentably distinct thereover. Reconsideration and withdrawal of the rejection is respectfully requested.

In view of the amendments and remarks hereinabove, Applicant respectfully submits that the instant application, including claims 1, 7, and 8, is in condition for allowance. Favorable action thereon is respectfully requested.

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Any questions with respect to the foregoing may be directed to Applicants' undersigned counsel at the telephone number below.

Respectfully submitted,

/Robert F. Chisholm/
Robert F. Chisholm
Registration No.: 39,939
Attorney for Applicants

GE Healthcare, Inc.
101 Carnegie Center
Princeton, New Jersey 08540-6231
Tel: (609) 514-6905
Fax: (609) 514-6572

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